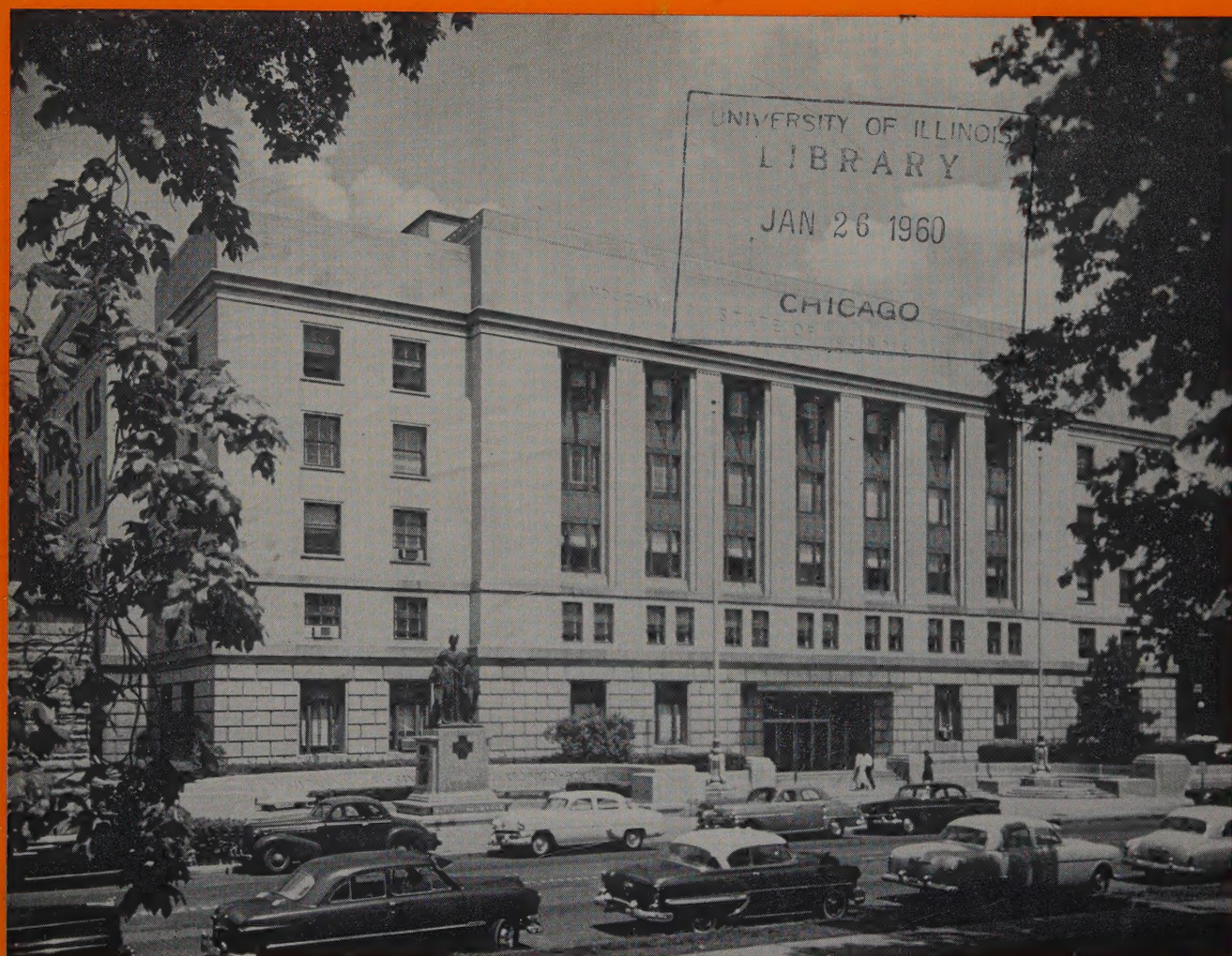




# *the* **ILLINOIS ENGINEER**



Illinois State Armory at Springfield—Site of ISPE Diamond Jubilee Exposition, May 4-8

THE ILLINOIS ENGINEER  
JANUARY, 1960  
VOLUME XXXVI, NO. 1



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# P. F. T. Gas Scrubber Saves Miami Plant

## \$25,000 A Year

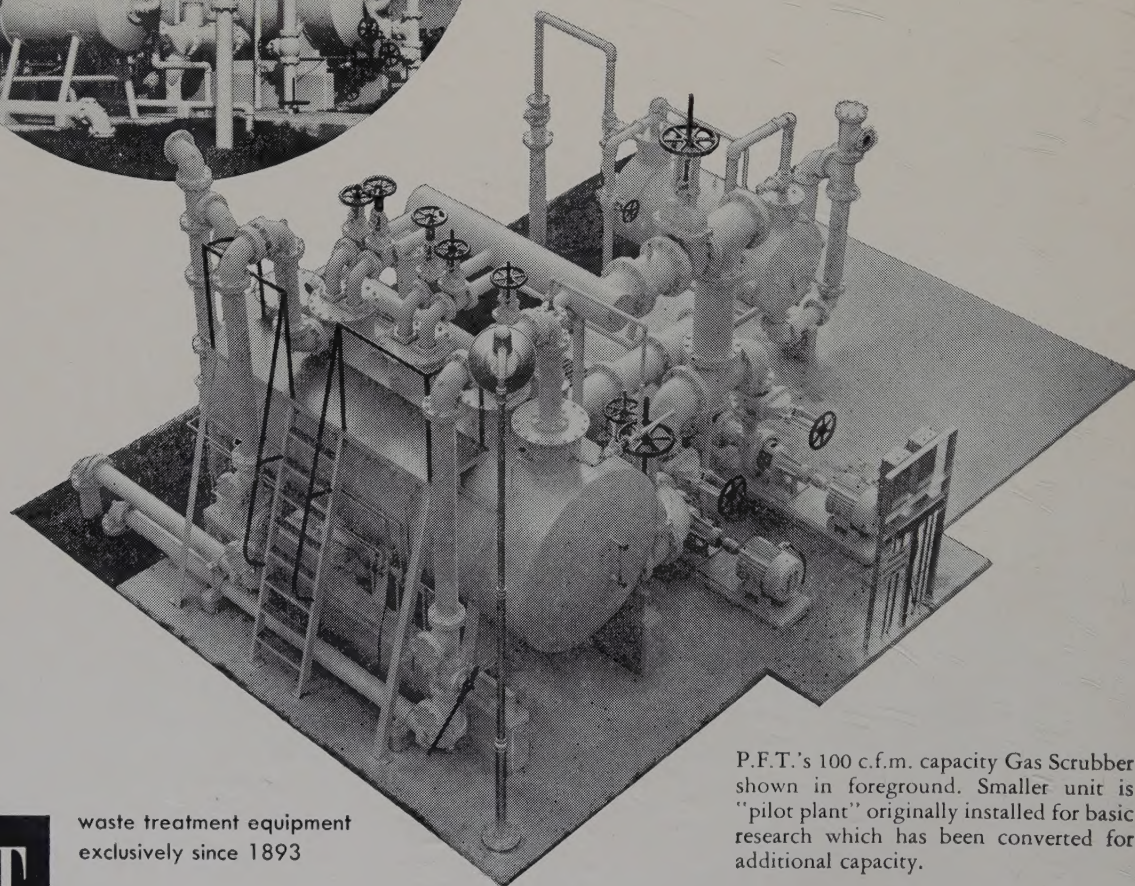
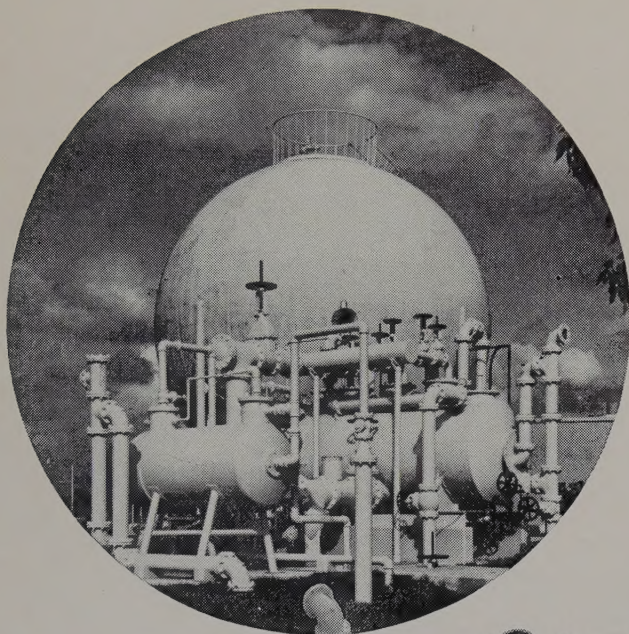
The formation of hydrogen sulfide has been the source of operating and maintenance problems in sewage treatment plants in many sections of our country—Miami, Florida's new plant was no exception.

Normally, sewage treatment plants produce and collect their own gas for fuel use. At Miami the gas was found to have a very high hydrogen sulfide content—so high that it could not be used for engine fuel. Therefore, it was necessary to purchase oil for engine operation at a cost of between \$50 and \$75 a day.

P.F.T. engineers collaborated with Miami officials in the design of a liquid type gas scrubber providing a "pilot plant" unit for study under actual plant conditions.

After months of testing with this P.F.T. "pilot plant" unit a full scale gas scrubber was developed and installed. This unit having a rated capacity of 100 c.f.m. is now providing usable gas fuel for the gas engines. It is anticipated that the P.F.T. Gas Scrubber installation will save Miami about \$25,000 annually.

Here is another instance of P.F.T.'s contribution in developing modern sewage treatment equipment for growing, progressive communities.



P.F.T.'s 100 c.f.m. capacity Gas Scrubber shown in foreground. Smaller unit is "pilot plant" originally installed for basic research which has been converted for additional capacity.

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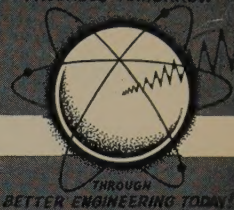
THE

# ILLINOIS ENGINEER

ILLINOIS SOCIETY OF PROFESSIONAL ENGINEERS, Incorporated

Affiliated with the National Society of Professional Engineers

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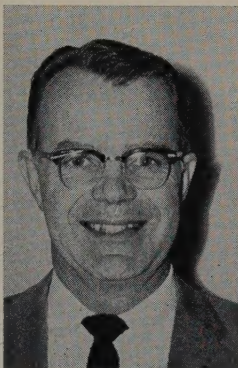
## THE POWER OF A VOTE!

By L. D. HUDSON, Acting President

ISPE's pace for 1960 will be greatly influenced this month by the voting of Corporate Members. It is hoped that every ballot will be returned.

### Pause For Expression

The vote on the Amendment to Article V of the Constitution will clearly show the desire for Society program expansion. Reasons for a small adjustment to the dues structure are shown in the "ISPE Action Chart" published in the October, 1959, issue of the ILLINOIS ENGINEER. In voting, each Corporate Member will find that his "voice" will be heard. This is important because any Constitutional amendment requires an affirmative vote of two-thirds of the votes cast and it is required that at least 20 percent of the Corporate Members cast affirmative ballots. Nearly 500 affirmative votes will therefore be required.



LeVerne D. Hudson

### Communication The Key

President Magowan expressed the desire to see the pattern of Society communication improve during this operating year. As you have seen, the ILLINOIS ENGINEER has been providing better coverage of events than ever before. The Executive Director's travel has been increased to assure better Chapter contact. Favorable interest in the proposed constitution amendment will make it possible to expand the publication of progress reports to the members. It will also permit a long-awaited budgeting for the public relations program (our outside voice). Many of the professional contributions such as those coming from the functional sections will become policy and then practice as they can become known by publication.

The Society is ready to take good advantage of the Constitution change if it is supported.

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## SUMMARY OF BOARD OF DIRECTION MEETING, JAN. 9

1. Recommended to the Board to appoint a special committee of three to continue study of permanent ISPE office space.

2. Expanded Society services and programs during 1959 resulted in budget deficit of \$990.

3. Matter of Federal Government contracts for engineering work not requiring registered engineers referred to Resolutions Committee with instructions to prepare an appropriate resolution to be presented by our National Directors at the NSPE meeting in Wichita February 18-20.

4. Chicago Chapter requests that ethics and practice case be referred to ISPE Ethics and Practice Committee.

5. Board adopts 1960 budget (sent out with dues statements).

6. Budget Committee to study recommendation of changing Society budget year to coincide with administrative year.

7. Membership to vote on increase in State Society dues to be effective in 1961.

8. "Guide" Chapter Constitution draft referred to chapters for study and comment to be returned to ISPE Constitution and Bylaws Committee by March 1.

### 9. Functional Sections

(a) Organizational chart approved as a guide for use in promoting and publicizing ISPE Functional Sections.

(b) Suggested Rules and Bylaws from original organization of Functional Sections referred to Constitution and Bylaws Committee for incorporation in the ISPE Constitution and Bylaws, with report requested for presentation at March Board meeting.

(c) Interprofessional Relations Committee to look into possibility of a joint organization between ISPE, IACE and CACE for the purpose of working on matters of Fees and Salaries, Ethics and Practice, and Legislation.

10. Chapter Officers Conference attendance (January 30, 10 a.m., Peoria, Pere Marquette Hotel) urged for all Chapter Officers plus one Committee Chairman from each Chapter (preferably Membership Chairman).

11. Board elects 11 National, 5 EIT and 1 Student applicants under regular program and 3 EIT applicants under Introductory Program.

12. Method to provide a minimum of six months free membership in Society to Introductory Members referred to Executive Director to work out with NSPE.

13. By unanimous standing vote, the Board approved making a definite commitment to hold the 75th Diamond Jubilee Exposition. All Chapter officers and Board members are to be sent brochures, contracts, and

lists of firms which have received general mailing or have been contacted by personal calls.

14. Board voted 15 to 5 that ISPE limit formation of Student Chapters to schools which are accredited by ECPD.

15. John Dolio approved by Board as a member of the Interprofessional Relations Committee.

16. Appointments to the Exposition Committee were approved as follows:

S. T. Anderson	Kalmer Klammer
Mike Besso	Vincent Lauters
Floyd Canfield	Jack Reynolds
Herschel Cudworth	Lesley Ryburn
Jack Finley	John Shaneman
Robert Geyer	Lee Sullivan
Don Houser	Emil Tiona
Hamilton Jones	Paul Troemper
	Carl Wieland

The above committee members are under General Chairman Charles A. Marr.

17. Board adopts Administrative Policy on Policies.

18. Robert French approved as Chairman of Committee on Atomic Energy.

19. W. A. Oliver approved as Chairman and A. W. Neureuther as member of Shedd Memorial Committee.

20. Board waives requirement of written request and unpaid dues and grants Life Membership to Professor H. F. Moore of Champaign County Chapter.

21. Board approves motion that reports of committees requiring action shall be submitted in writing to ISPE office so that they may be distributed to Board members at least one week prior to Board meeting.



Charles A. Marr, Chairman, Diamond Jubilee Exposition.



## PRESIDENT'S MESSAGE

By FRANK W. EDWARDS

### COMPENSATION FOR ENGINEERING SERVICES

*In August, 1958, the following article by Frank W. Edwards, then President of the I.S.P.E., was published in the ILLINOIS ENGINEER. Mention of this article in several national publications recently resulted in our receiving so many requests for copies of it that the supply on hand has been exhausted. We reprint it now to fill requests we have been holding and to allow our readers an opportunity to re-read it.*

Engineering is a profession which requires of its members personal ability, honesty and integrity, together with sound technical training and broad qualifying experience. Selection of engineers for professional assignments, either as employees or as consultants for individual projects, should be made on the basis of these qualities. Salaries and fees are of secondary importance in making selections. However, sound engineering thought and adequate engineering services can be furnished consistently only when adequate compensation is provided for the engineer. This is true whether the engineer is an employee receiving a salary or a consultant receiving a fee.

Engineering services involve not only knowledge and experience but require thorough investigations and detailed studies and analyses. Only competent engineers can perform such services, and the supply of highly qualified persons over the years depends to a large extent on the financial rewards which may be anticipated. Intangible rewards for engineers are many, but most will agree a reasonably good living is important.

If investigations, studies and analyses are slighted in order to reduce engineering costs the owner or client suffers. Intelligent decisions can be made only after thorough detailed engineering work. Good engineering often saves many times its cost through proper design which in turn leads to economical construction.

As engineers, we are at fault in not explaining these facts sufficiently to the general public. Lack of understanding by the layman, as well as some engineers, has created or condoned bidding on a price basis for engineering services. Bidding on a price basis for engineering services is neither in the public interest nor the

engineer's interest. The general public does not understand why this is true. Many engineers also seem ignorant of the fact.

Competitive enterprise is the foundation for our economic system. The one who can produce goods which are satisfactory for the purpose at the lowest cost continues in business. Others fail. The general public logically asks the question why price competition should not apply also to engineering services.

Price competition for goods and workmanship is fundamentally different from price competition for professional services whether these be engineering legal or medical. Materials and workmanship can be observed, tested, measured, compared and evaluated on a tangible basis, whereas results of engineering thought and skill can not be subjected to precise measurement. The end product of a manufacturing operation can be compared with specifications which the product is designed to meet. Products produced at the lowest cost which meet the specifications therefore provide the buyer with the best bargain.

Specifications for engineering brains cannot be prepared. Bidding for engineering services, therefore, is ridiculous as no standards can be established for evaluating bids. The absurdity of this procedure may be illustrated by a hypothetical situation where bids might be requested for automobiles in general. The owner might want a Cadillac but the low bids always would be received from dealers selling much lower priced cars. Not all engineers have the same aptitude, training and experience, or in the case of a consultant the same facilities, for providing required services. It is in the interest of employers and clients to select engineers with qualifications best suited for the proposed project and then, and not until then, agree on a salary or fee.

In order to assist employers and clients in determining equitable compensation the Illinois Society of Professional Engineers has prepared, adopted and published salary and fee schedules. These schedules are designed to produce for the normal case a reasonable return to the engineer for his investment in education, experience, time and facilities. An employer or a client may well be suspicious of any engineer who proposes to work for salaries or fees substantially less than indicated by these schedules.

The owner should realize that the minimum overall cost of an engineering project is the important factor rather than just one segment of total cost. Inadequate investigations and analyses inevitably lead to higher construction costs than are justified. For the total project, construction cost normally is in the neighborhood of 90 per cent of the total, while engineering, legal, and other items account for only 10 per cent. It is readily seen that inadequate services resulting from inadequate

(Continued on Page 8)



Frank Edwards



## I.S.P.E.-N.S.P.E. DUES DISCUSSED

*The following letter is an answer to one of the very few members who complained that ISPE-NSPE dues are too much. The Board had requested that a summary of dues comparisons be printed, therefore, this letter is reprinted to show the significant fact that Engineers enjoy "the most for the least" of any group surveyed.—The Editor. —*

January 12, 1960

L. J. K., P.E.,  
c/o Electronics, Inc.  
Cicero, Illinois

Dear Mr. K.:

I wish to thank you for your letter of January 4 in which you expressed your views that the combined Professional Engineer Society dues are too high. You invited me to take a minute or two to answer your letter with an expression of my feelings. I am happy to give you my expressions, which will be in the form of some interesting comparisons and at the same time pose vital questions to you as an engineer and a member of a distinguished profession.

After receiving your letter we checked with other organizations to determine their dues schedules. An attorney in Illinois pays state and local dues which range from \$35 to \$60 per year. Add a minimum of \$16 for American Bar Association dues and the range of combined dues for a lawyer is \$51 to \$76. The medical profession pays combination local, state and national dues of \$90 per year. (This does not include membership dues in the doctor's "technical" organization, such as the College of Surgeons.) Dentists pay \$75 a year for dental society combinations (local, state and national) and in the case of Oral Surgeons, an additional \$60 is paid for "technical" society affiliation. The architects in Illinois pay a combined total of \$67 a year.

Going outside the so-called professional groups to the trade union groups, we found that an operating engineer (heavy equipment operators) pays \$6.25 per month, or a yearly total of \$75. Bartenders pay \$4.00 monthly, or \$48 per year, and the waitress who serves you in a restaurant pays \$3.50 per month, or \$42 per year. Of the ones surveyed, no group has a lower dues schedule than the engineers' society, and the waitress in the corner restaurant is paying \$14 more than the dues of which you have complained. In the instance of the trade union groups, they usually have no alternative but to belong to their local if they expect to work. You, as a professional engineer, have a choice in the matter. You can continue as a member and help your entire profession to gain higher prestige and recognition in the eyes of the general public or, if you feel that you are throwing "hard-earned money to the wind," you have the choice of resigning your organization. No one will attempt to put any pressure on you. This is

not true in the case of the heavy equipment operators, bartenders, and waitresses.

I, as Executive Director of your Professional Society, belong to the American Society of Association Executives, to which organization I pay annual dues of \$65. In one meeting last summer I gained information which helped me in doing a better job for the organization to the extent of many times my annual dues—in fact, if I should have gotten a professional consultant to give the same information I received from my "professional" organization, it would have cost a minimum of \$300 to \$500.

The ISPE and the NSPE (in which your membership gives you an affiliation and a voice) are working to enhance the status and prestige of your profession and to assure that your independence of thought remains inviolate. We maintain a constant watch over legislation at the State and National level which would take away from you the freedoms of choice which have been taken away from those who are compelled to belong to a trade union. Other activities which affect you indirectly are salary and fees surveys (which ultimately reflect in better salaries as the profession becomes more widely recognized), ethics and practice activities (which assure that your registration as a professional engineer is not something without meaning, in that those who would infringe upon your rights by practicing engineering without being duly qualified and registered are prohibited by law, and they and unscrupulous members of the profession are policed by your professional society). Numerous activities are performed in addition to these specifically mentioned which makes your professional society certainly a real value and a great, great bargain compared to what other professional groups—and, for that matter, non-professional groups—are willing to pay to extend recognition of their chosen field.

The question I ask is: "What is the independence and prestige of your profession worth?" You hold the answer.

Very truly yours,  
L. C. GODDARD,  
Executive Director

LCG:mw

Compilation of dues outlined in foregoing letter:

Doctors .....	\$90.00	Does not include "technical" dues.
Lawyers .....	\$35.00-\$76.00	Does not include "technical" dues.
Architects .....	\$67.00	
Association Executive....	\$65.00	
Dentists .....	\$75.00	Plus \$60 "technical" dues.
Equipment Operators....	\$75.00	
Bartenders .....	\$48.00	
Waitresses .....	\$42.00	
\$30.00 PROFESSIONAL ENGINEER DUES IS A BARGAIN.		



## NOMINATING COMMITTEE SLATE FOR 1960-61 OFFICERS

**President—L. D. Hudson** (1-year term)

LeVerne joined ISPE in 1939 as a State member, and became a National member in 1946. He is a graduate of the University of Illinois in Civil Engineering (1937) and received an MPH in Public Health Engineering from the University of Michigan in 1952. He is a member of Capital Chapter, having served as its Treasurer in 1949, Secretary in 1950, President in 1951, and as Chapter Representative from 1955 through 1958. In 1958 he was named Assistant to the President and in 1959 he has served the Society as 1st Vice President and Acting President.

He is Regional Sanitary Engineer for the Illinois Department of Public Health, is married and has two daughters.

**Vice-President—Linus H. Brown** (1-year term)

Linus became a National member in ISPE in 1950. He is a graduate of Purdue University (BSCE 1938) and has done graduate work at Northwestern University. A member of Chicago Chapter, he has served as Secretary and Treasurer in 1956, as Vice President in 1957, and as President in 1958. Linus is now State Chairman of the Functional Sections of ISPE. Linus is staff engineer for DeLeuw, Cather & Co. He and his wife, Virginia, have five children.

**Vice-President—Harold F. Sommerschield** (1-year term)

Harold is ISPE's 1958 State Membership Chairman whose committee brought the first place Membership Plaque to Illinois. He joined ISPE as a State member in 1945 and became a National member in 1947. He is a member of Chicago Chapter and served as Chapter Representative from 1951 through 1954 and from 1956 through 1958, as Chapter President in 1955. He has recently been appointed by the Board of Direction to act as Assistant to the President in handling the Operations Group of Committees for the remainder of this Society year.

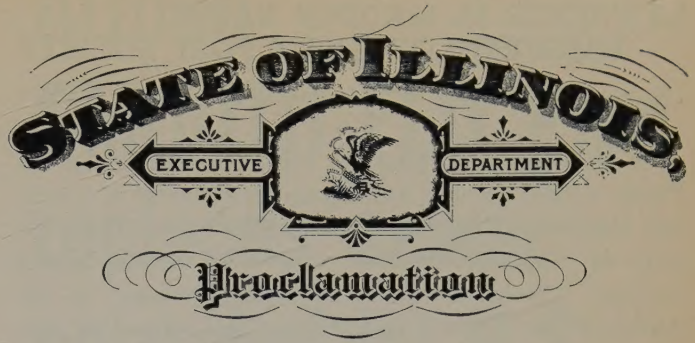
Sommerschield attended Armour Institute of Technology. He is with Stanley Engineering Company in Chicago. He and his wife, Virginia, live in Park Ridge.

**Vice-President—Manuel Garcia** (1-year term)

Manuel joined ISPE as a State member in 1946 and became a National member in 1948. He is a graduate of David Ranken School of Mechanical Trades, Washington University, and has taken additional study courses. A member of St. Clair Chapter, he served as Chapter Secretary from 1948 through 1954, as Vice President in 1955 and President in 1956. In 1959 he served ISPE as 3rd Vice President. Manuel is Assistant Chief Engineer of the Alton & Southern Railroad.

He and his wife, Betty, and their three daughters live in East St. Louis.

(Continued on Page 10)



WHEREAS, The year 1960 marks the Diamond Jubilee, the 75th anniversary of the founding of the Illinois Society of Professional Engineers, and

WHEREAS, The annual convention of the Illinois Society of Professional Engineers will be held in Springfield on May 5th, 6th, and 7, 1960, and

WHEREAS, In tribute to the progress of the engineering profession in Illinois during the past seventy-five years the Illinois Society of Professional Engineers will sponsor a Diamond Jubilee Exposition to be held at the State Armory in Springfield from May 4th to May 8, 1960 inclusive,

NOW, THEREFORE, I, William G. Stratton, Governor of the State of Illinois, do hereby proclaim the month of May, 1960 as ENGINEER'S MONTH throughout Illinois, and urge the appropriate observance of the occasion.

*In Witness Whereof, I have hereunto set my hand and caused the Great Seal of the State of Illinois to be affixed.*



BY THE GOVERNOR

*Charles S. Caspary*  
SECRETARY OF STATE

*Done at the Capitol, in the City of Springfield, this THIRTY-FIRST day of DECEMBER, in the Year of Our Lord one thousand nine hundred and FIFTY-NINE, and of the State of Illinois the one hundred and FORTY-SECOND.*

*William G. Stratton*  
GOVERNOR

## CONTEST FOR CONVENTION ATTENDANCE

Jerry Margrave, Acting Convention Committee Chairman, has announced that plans are progressing for an outstanding Convention Program to celebrate the ISPE 75 year milestone. To instill interest and competition among the Chapters, a contest for attendance is being worked up. The winning Chapter President will tour Springfield in a luxurious manner while the losers will get about in a surprising way??

MUCH WILL BE WRITTEN LATER! The Convention is May 4-8, 1960, and Headquarters will be the ST. NICHOLAS HOTEL, SPRINGFIELD. . . YOU ALL COME!



## LAWRENCE M. MADDEN NAMED PRESIDENT OF GUAM POST SOCIETY

(EDITOR'S NOTE: Mr. Madden is a member of ISPE.)

Mr. Lawrence M. Madden, P.E., Chief Officer of the Public Utility Agency, Territorial Government of Guam, was installed as 1960 President of the Guam Post, Society of American Military Engineers, at the Post's Annual "President's Ball" held 25 November, at the Andersen Air Force Base Officers Club. The Ball was a formal dress dinner dance, with all proceeds going into the Post's Scholarship Fund.

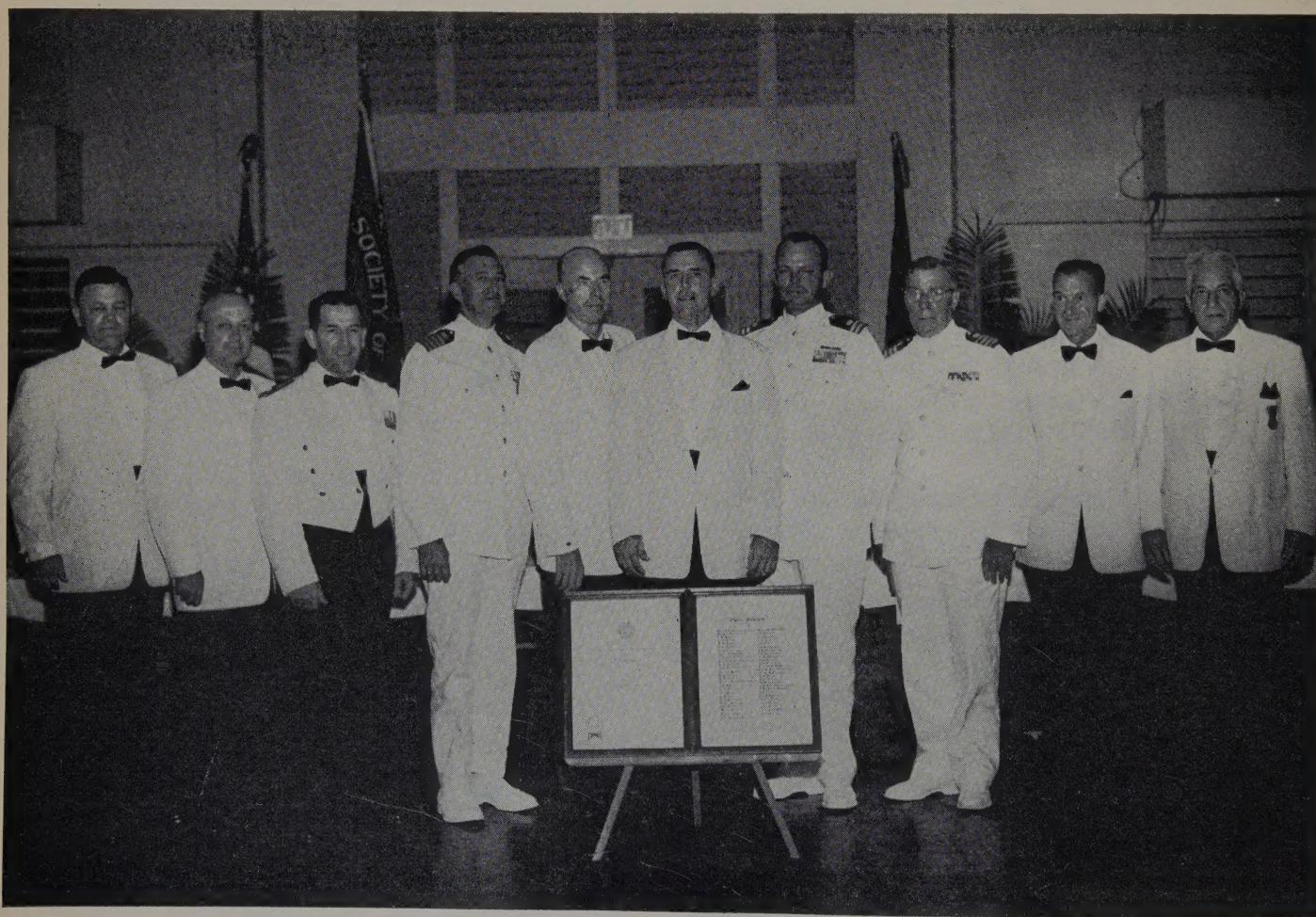
The invited guests were the High Commissioner of the Trust Territory; the Governor of Guam, and the Senior Officers on Guam of the U. S. Navy, Air Force, Army, Marine Corps, and Coast Guard.

Installed as First Vice President—Commander R. L. Hall (CEC), U. S. Navy, Operations Officer, Public Works Center, Guam; Second Vice President—Mr. F. M. Mayberry, Supervisory Maintenance Engineer, Public Works Department, U. S. Naval Air Station, Guam;

Executive Secretary—Mr. Chet Eyer, Manager, Water Division, Public Utility Agency, Territorial Government of Guam; Treasurer—Mr. George E. Hartung, Supervisory Planner and Estimator, Public Works Department, U. S. Naval Supply Depot.

Lieutenant V. B. Larue, Civil Engineer Corps, U. S. Navy, Public Works Officer, U. S. Naval Supply Depot, Guam, Mariana Islands (Immediate Past President, Guam Post, Society of American Military Engineers).

The Post's current scholarship program consists of a full five-year engineering course at the University of the Philippines for a native born Guamanian. The course leads to a Bachelor's Degree in engineering and its recipient is obligated to practice engineering on Guam. This scholarship includes tuition, textbooks, room and board, and transportation to and from the Philippines. It is valued at nearly \$6,000 per recipient. The only student to receive this scholarship so far is J. E. Onera of Ipao, Tumon, Guam, who is now at the Philippine University in his first year of electrical engineering.



Picture shows Officers and Board of Directors of the Guam Post, Society of American Military Engineers, taken at the President's Ball and Installation. Left to right: F. M. Mayberry; Cdr. E. J. Ralph; Lt. Col. D. F. Berschel; Capt. P. W. Roberts; F.M. Poole; L. M. Madden; Lt. V. B. LaRue; Capt. E. B. Greey; Chet Eyer; G. E. Hartung.



## NORTH SHORE CHAPTER

Meeting held December 9, 1959, Campus Room, Orrington Hotel, Evanston.

### Inventions Out of the Past

Brainstorms of some of our most noted citizens are on file at the U. S. Patent Office. We've all heard of Inventors Thomas A. Edison, George Westinghouse, Lee DeForest and Elias Howe, but who knows that Abraham Lincoln and Samuel Langhorne Clemens received patents on "new and useful" inventions?

Faithful members of the North Shore Chapter were treated at their December Meeting to a showing of slides on patents of all sorts. Bob Wendt, Professional Engineer-Patent Lawyer, displayed and discussed a part of his collection of extremely interesting patents issued by the U.S. Patent Office.

President Abraham Lincoln was issued a patent for a device to buoy river vessels over shoals. The buoyant chamber principle is the same as that used later for submarines. Mr. Lincoln saw the need for this invention while on his much-publicized river trip to New Orleans. The principle became widely used but, as far as is known, Mr. Lincoln did not receive a nickel for this contribution to scientific progress.

Another surprise was a patent issued to Samuel Clemens for a scrapbook. This book contained pre-placed adhesive strips on each page for the purpose of conveniently attaching newspaper clippings. Apparently this patent did not prove too profitable.

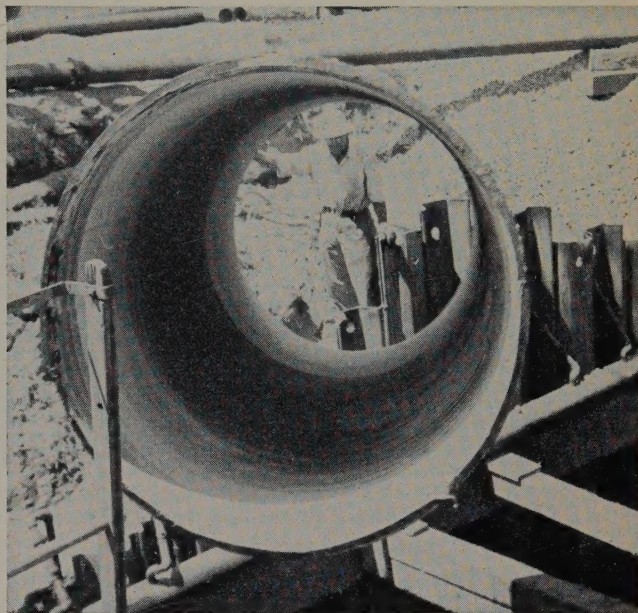
Glamour for the ladies of 1912 was not overlooked. An interesting patent was issued for the purpose of emphasizing the bust line. This early-day falsie came complete with built-in lead weights. According to the inventor's claim, these weights would cause the padding to "vibrate in a lifelike manner." This patent was extremely interesting to the assembled professional engineers.

Altogether, Mr. Wendt exhibited about 30 slides of original patents, which ran the gamut from such useful products as the mercury vapor lamp, the tungsten filament, an electric iron, wireless telegraphy, and microphone to an anti-snoring device and an underarm air-conditioner.

The business portion of the meeting included reports from the various committee chairmen and a discussion of future planning of chapter activities. It was decided that a dinner-dance should be held in connection with Engineers' Week in February. Details of this will be announced later.

In January, the Chapter plans to meet at the Holloway House in Skokie. The program will include a movie from the Bell Telephone Company. All chapter members are urged to attend and bring a buddy.

# Armco SMOOTH-FLO Pipe replaces sewer corroded by H<sub>2</sub>S



In Sacramento, California, part of a 12-year-old rigid pipe sanitary sewer had been eaten away by hydrogen sulphide gases. The resulting seepage undermined the sewer foundation, causing settling and cracking. To withstand the corrosive gases and to maintain good alignment in the unstable soil, engineers specified Armco SMOOTH-FLO® Sewer Pipe as a replacement.

Armco SMOOTH-FLO Pipe can help solve *your* sewer problems, too. SMOOTH-FLO has the proved durability and strength of corrugated metal pipe plus a smooth interior lining for top flow capacity. For complete details on Armco Sewer Structures, write to Armco Drainage & Metal Products, Inc., 426½ S. Fifth Street, Springfield, Illinois, 20 North Wacker Drive, Chicago, Illinois.



## ARMCO DRAINAGE & METAL PRODUCTS

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(Continued from Page 3)

compensation can produce a large increase in total cost. On the other hand competent and complete engineering normally will produce more economical construction.

ISPE should devote its talents and its resources toward promotion of better understanding of the principles involved both inside and outside the profession. All professional engineering groups consider competition for engineering services on a price basis as unethical. It is insufficient, however, to say that bidding violates professional ethics. It is necessary to explain fully to the public why bidding is unsound.

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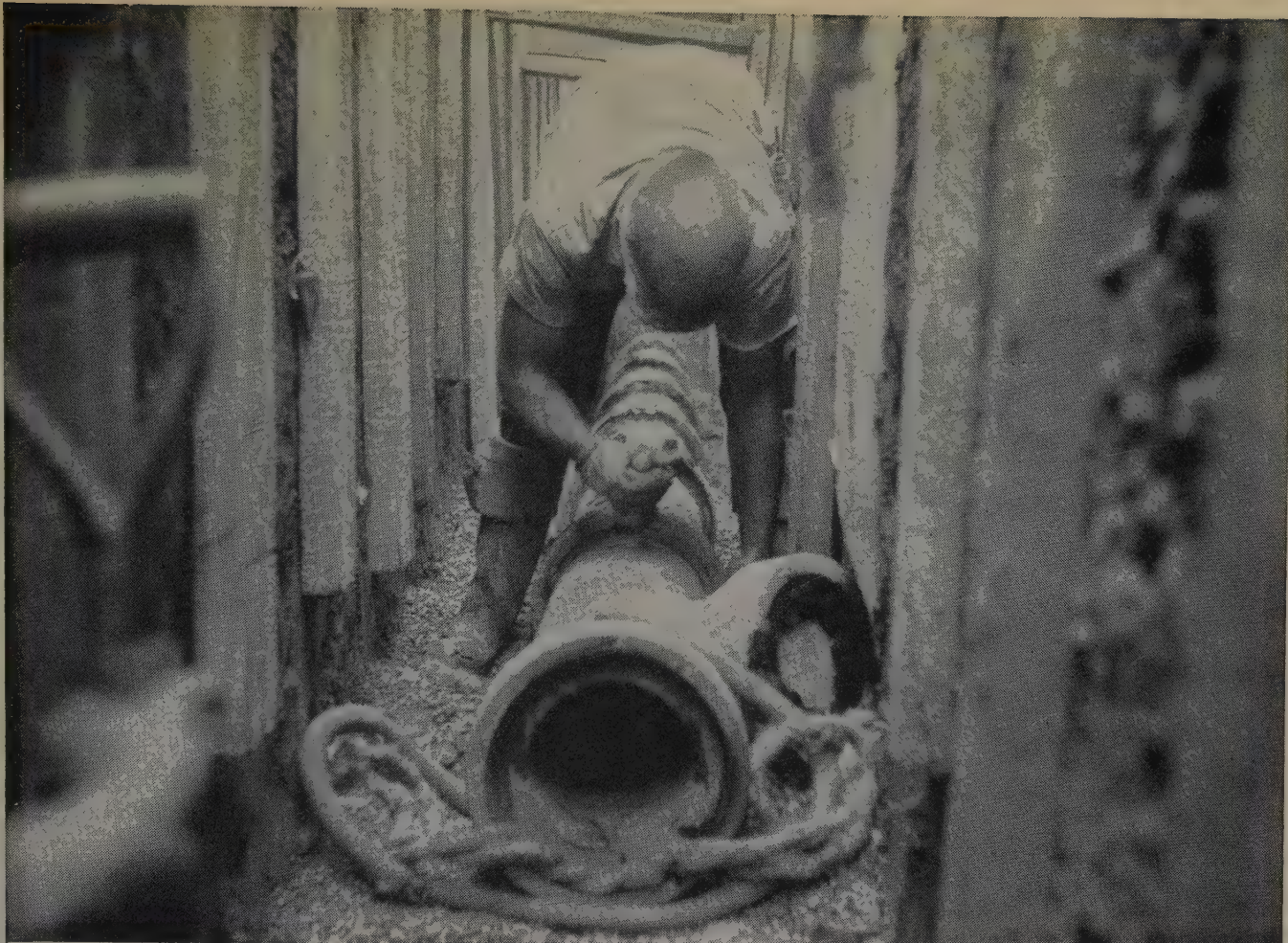
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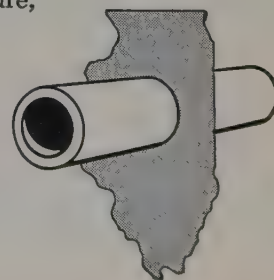
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(Continued from Page 5)

**Secretary—John E. Housiaux** (2-year term)

John became a National member of ISPE in 1954. He is a graduate of the University of Colorado with a BSME in 1945 and his Master's Degree in 1949. John has been Central Illinois Chapter's Representative from 1957 through 1959 and Chapter President in 1956. He was elected State Secretary in 1959.

He is with Warren & Van Praag, Inc.

John and his wife, Phillis, and their two children live in Decatur.

**Treasurer—R. D. Collins** (1-year term)

Dean was an Honorary Junior Member of the Society in 1949, became an EIT member in 1953 and a National member in 1955. He received his Bachelor's Degree in Engineering from the University of Illinois in 1949 and his Master's Degree in 1951. He has served as Capital Chapter's Secretary (1955), Vice President (1956), President (1957), and Representative in 1959. He is a partner in the firm of Hanson, Collins & Rice.

Dean and his wife, Barbara, and their three children live in Springfield.

**NATIONAL DIRECTORS**

M. E. Amstutz is the Committee's recommendation to be elected for a one-year term. Mel became a State member of ISPE in 1931 and a National member in 1940. He received his Bachelor's Degree from Northwestern University in 1925. He belongs to Lake County Chapter and has served as Chapter President in 1935, Director in 1937, State Vice President 1938 and President in 1939. In 1958 and 1959 he served as National Director.

Amstutz is County Superintendent of Highways for Lake County. He and his wife, Mary Leora, live in Libertyville.

Recommended for a two-year term as National Director is C. E. Missman, of Moline. Cliff became a State member of ISPE in 1937 and a National member in 1947. He served West Central Chapter as President in 1951 and 1952 and as Chapter Representative in 1957 and 1958. In 1958 he was appointed as Assistant to the State President. He served during 1959 as Alternate National Director.

He received his degree from the University of Illinois in 1933. Missman is a partner in the firm of Missman, Stanley, Farmer & Associates, of Rock Island.

Also recommended for a two-year term as National Director is Past State President Frank W. Edwards. Frank became a National member in 1947 in Pennsylvania and transferred to the Illinois Society in 1949. He received a Bachelor's Degree from the University of Iowa in 1928, a Master's Degree in 1930, and a C. E. degree in 1944. He is a member of Chicago Chapter and served as Vice President in 1951, President in 1952, as a representative to the Illinois Engineering Council in

1951, as State Vice President in 1957, as President in 1958, and as National Director in 1959.

Frank is Manager of the Chicago office of Stanley Engineering Company.

He and his wife, Harriet, live in Clarendon Hills. They are the parents of two daughters.

W. S. Gray is the Nominating Committee's recommendation to be elected for a three-year term. Gray became a State member of ISPE in 1945 and a National member in 1953. He received a Bachelor's degree in Chemical Engineering from Armour Institute of Technology in 1936. He has served Joliet Chapter as Secretary-Treasurer in 1949, Vice President in 1950, President in 1951, Chapter Representative from 1953 through 1958, and has served ISPE as National Director during 1959.

Bill is Supervisor of the Gas Accounting Department of The Peoples Gas Light & Coke Co., in Chicago.

He and his wife, Barbara, and their children live in Joliet.

**ILLINOIS ENGINEERING COUNCIL REPRESENTATIVES**

Kenneth E. Welton is recommended for a one-year term, to begin January 1, 1961. Ken received a BSCE at the University of Illinois in 1934. He belongs to Lake County Chapter and has been Chapter Treasurer (1955), Secretary (1956), Vice President (1957), and President (1958). During 1959 he has served as State Chairman of the Publications Committee.

He is Bridge Engineer for the Lake County Highway Department.

He and his wife, Genevieve, live in Waukegan.

J. D. Voorhees is recommended for a two-year term, to begin January 1, 1961. Voorhees became a State member of ISPE in 1946 and a National member in 1952. He received a BSCE degree from the University of Illinois in 1926. He is a member of Madison County Chapter and served as Chapter Secretary-Treasurer in 1947 and 1948, as President in 1949, Chapter Representative in 1956 and 1957, and as Chairman of ISPE's Representatives to the IEC from 1957 through 1959.

Voorhees is owner of The Voorhees Company, Engineers, in Alton. He and his wife, Thelma, live in Wood River.

Recommended for a three-year term is Robert H. Renwick, who joined ISPE as a Junior member in 1950 and became a National member in 1954. He has served as Rock River Chapter Vice President (1955), President (1956), and Chapter Representative (1957). He is now a partner in the engineering firm of Sexton & Renwick and is a member of Illinois Valley Chapter.

Renwick received his BSCE degree from the University of Illinois in 1950. He and his wife, Marjorie, live in Ottawa.



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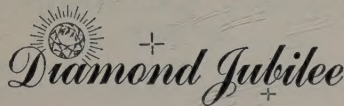
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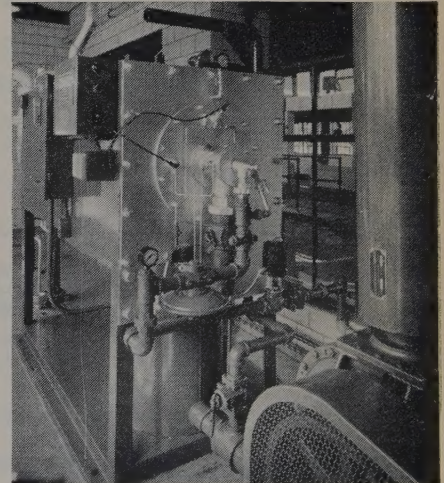
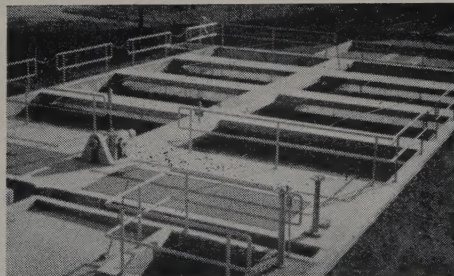
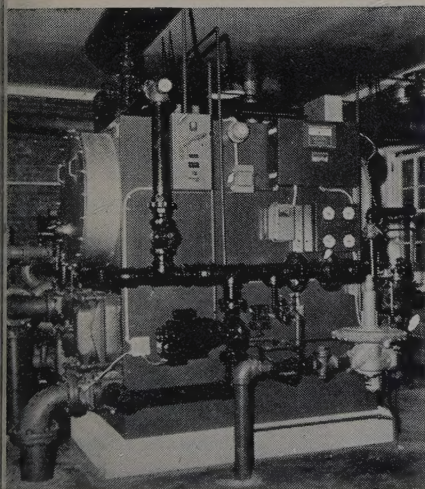
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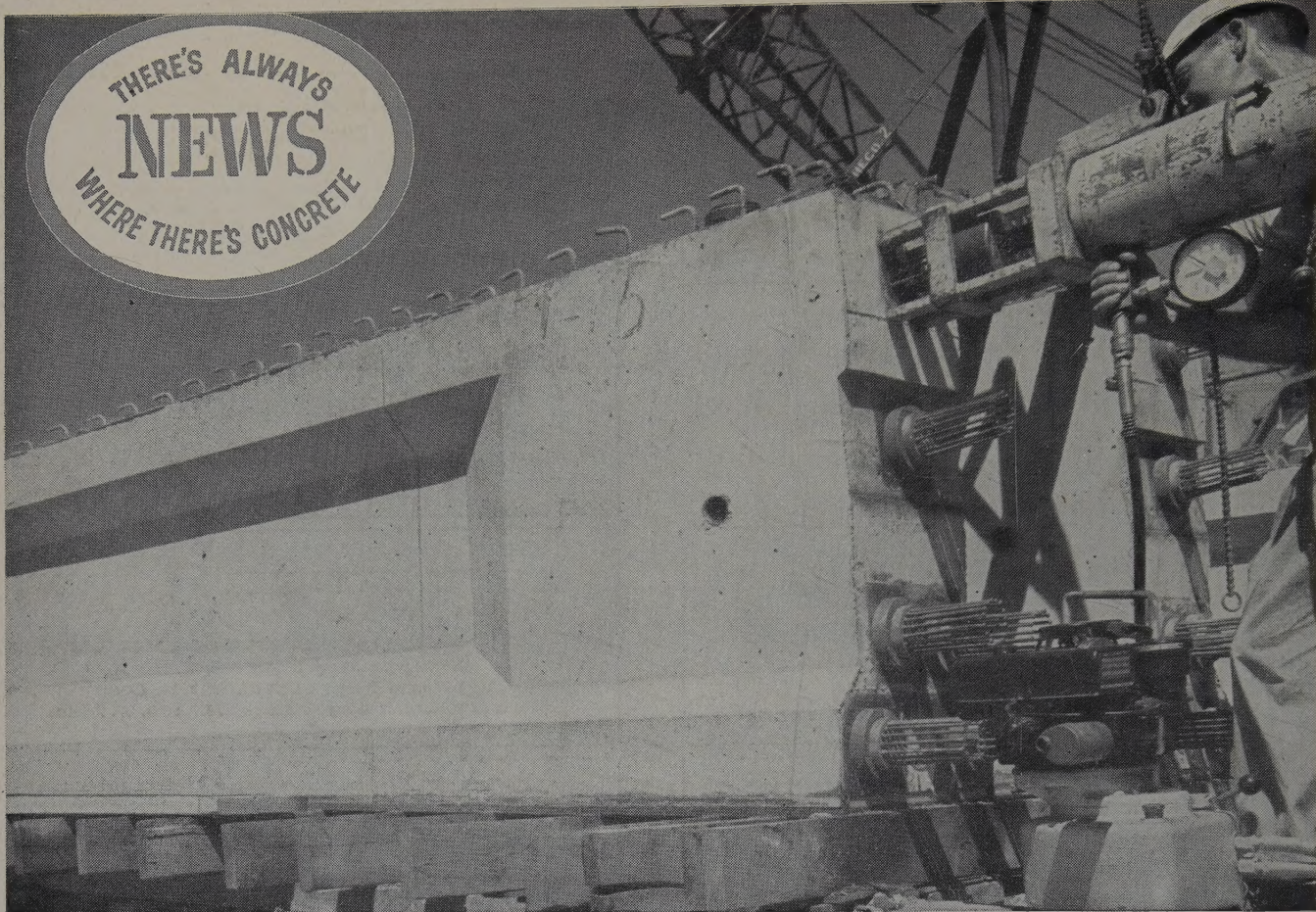
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